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Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

JUN 18 2007

07-AMCP-0202

Ms. Jane A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton
Richland, Washington 99354

Mr. Nicholas Ceto, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Blvd., Suite 115
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Addressees:

COMMENT RESPONSES ON THE REMEDIAL DESIGN/REMEDIAL ACTION WORK
PLAN FOR THE 221-U FACILITY, DOE/RL-2006-21, DRAFT A, AND DRAFT TRI-PARTY
AGREEMENT, AGREEMENT IN PRINCIPLE FOR CENTRAL PLATEAU FACILITY
DISPOSITION

The purpose of this letter is to transmit the comment response package for the Remedial Design/Remedial Action Work Plan for the 221-U Facility, DOE/RL-2006-21, Draft A to the State of Washington Department of Ecology (Ecology) and the U.S. Environmental Protection Agency (EPA). Section 9.2 of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan provides a 30-day period for lead regulatory agency review and response to the comment responses.

Pursuant to Section 9.2 of the Tri-Party Agreement Action Plan, this letter provides a commitment to revise the Remedial Design/Remedial Action Work Plan for the 221-U Facility in response to written comments provided by EPA on March 7, 2007, and March 20, 2007, and by Ecology on March 27, 2007.

Also included is a draft Tri-Party Agreement, Agreement in Principle for Central Plateau Facility Disposition, which replaces the 221-U Facility-specific draft Tri-Party Agreement change package that the U.S. Department of Energy, Richland Operations Office (RL) submitted to the agencies (07-AMCP-0067) on December 20, 2006. The Agreement in Principle includes a proposal to develop milestone language for implementation of the 221-U Facility Record of Decision.

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Presuming the agencies respond favorably to the comment responses within 30 days of receipt, RL should be able to provide a revised Remedial Design/Remedial Action Work Plan for the 221-U Facility by October 31, 2007.

If you have any questions, please contact me, or your staff may contact Matt McCormick, Assistant Manager for the Central Plateau, on (509) 373-9971.

Sincerely,



Michael J. Weis
Acting Manager

AMCP:WCW

Enclosures

cc w/encls:

G. Bohnce, NPT

S. Harris, CTUIR

R. Jim, YN

S. L. Leckband, HAB

K. Niles, ODOE

Administrative Record, (221-U Facility [U Plant CDI])

Environmental Portal

cc w/o encls:

R. H. Engelmann, FHI

J. E. Hyatt, FHI

R. E. Piippo, FHI

J. R. Robertson, FHI

J. M. Stevens, FFS

J. G. Vance, FFS

R. E. Wilkinson, FFS

ENCLOSURE 1

Comment Responses on DOE/RL-2006-21, Draft A
Remedial Design/Remedial Action Work Plan for the 221-U Facility

Consisting of 24 pages, including cover page

REVIEW COMMENT RECORD (RCR)

1. Date

2. Review No.

3. Project No.

4. Page 1 of 3

5. Document Number(s)/Title(s):

Draft M85-06-01 Milestone Change Package for the Disposition of the 221-U Facility

6. Program/Project/Building Number

221-U Canyon

7. Reviewer

C. E. Cameron

8. Organization/Group

U.S. EPA/Hanford Project Office

9. Location/Phone

309 Bradley Blvd., Suite 115/376-8665

17. Comment Submittal Approval:

Organization Manager (Optional)

10. Agreement with indicated comment disposition(s)

Reviewer/Point of Contract

Date

Author/Originator

11. CLOSED

Reviewer/Point of Contract

Date

Author/Originator

12. Item

13. Page/Line

14. Comment(s)/Discrepancy(s)
(Provide technical justification for the comment)

15. Recommendation
(Provide detailed recommendation of the changes necessary to correct/resolve the comment)

16. Disposition
(Provide justification if NOT accepted.)

1

Change form

The 1996 AIP for the Canyon Disposition Initiative was used by the Tri-Parties to select the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial action process for the U Plant canyon building (221-U Facility). Prior to the proposed plan going out to public comment, EPA requested that DOE demonstrate how the Tri-Party Agreement Action Plan Section 8 requirements were being met for this key facility. DOE did not respond to this request and so EPA produced a cross walk (which was shared with project staff including the DOE Federal Project Director) detailing how the Section 8 requirements for this key facility were being met by the various remedial investigation/feasibility study, proposed plan, record of decision, and remedial design and remedial action documents. It is ironic that DOE has written the change form with such a heavy reliance on Section 8 disposition. The change form must be revised to focus on the CERCLA remedial action process including referring to the ROD requirements and the CERCLA remedial design and remedial action work plan and activities. This will make the form more consistent with the supplemental "Description/Justification Continued" section that follows.

RL is submitting a draft Central Plateau Facility Decommissioning Agreement in Principle in lieu of a revision to the M85-06-01 milestone change package. It is expected that follow-on discussions will address 221-U Facility remediation.

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12. Item	13. Page/Line	14. Comment(s)/Discrepancy(s) (Provide technical justification for the comment)	15. Recommendation (Provide detailed recommendation of the changes necessary to correct/resolve the comment)	16. Disposition (Provide justification if NOT accepted.)
2	Milestone descriptions	It is not clear that the creation of an M-85 milestone series is the optimal approach for the 221-U Facility remedial action milestones. Regardless, EPA expects all remedial action milestones for the Central Plateau to be consistent with the M-016 major milestone for completion of remedial actions by September 30, 2024. The draft milestone package included a milestone for completion of the remedial action with a "TBD" or To-Be-Decided date that would be no later than September 30, 2024. EPA believes that the date provided for this milestone at the end of the 60-day extension must be significantly earlier than the 2024 date as there are going to be many activities across the 200 Area that must be performed in advance to assure that all remedial actions meet the 2024 date. DOE should not have formally transmitted a change package with a "TBD" date for one of the interim milestones. An actual date should have been provided.		RL is submitting a draft Central Plateau Facility Decommissioning Agreement in Principle in lieu of a revision to the M85-06-01 milestone change package. It is expected that follow-on discussions will address 221-U Facility remediation end date.
3	Milestone descriptions	The milestone for removing the contents of the vessel in Cell 30 and subsequent disposal should not contain the word "disposition." This implies that there is an option to the record of decision requirement to remove all waste remaining above TRU levels after stabilization. Studies performed by DOE have clearly indicated that the material will remain well above 100 nCi/g in transuranic content after stabilization. The milestone must be consistent with the record of decision requirement. However, this milestone is not really necessary because the revised Tri-Party Agreement now contains a requirement for DOE to submit to the regulatory agencies a Remedial Design Report that must include 90% design for the remedy. As indicated in previous EPA comments, DOE needs to include an item in the schedule contained in the work plan for submittal of the Remedial Design Report.		<p>RL is submitting a draft Central Plateau Facility Decommissioning Agreement in Principle in lieu of a revision to the M85-06-01 milestone change package. It is expected that follow-on discussions will address 221-U Facility remediation.</p> <p>Accept; Figure 3-1 from the Remedial Design/Remedial Action Work Plan for the 221-U Facility (DOE/RL-2006-21, Draft A) will be revised to include provision of 90% design information in a Remedial Design Report.</p>
4	Milestone descriptions	While it is not ideal, EPA will consider an interim milestone that triggers follow-on interim milestones once the remedial design and remedial action has progressed.		RL is submitting a draft Central Plateau Facility Decommissioning Agreement in Principle in lieu of a

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12. Item	13. Page/Line	14. Comment(s)/Discrepancy(s) (Provide technical justification for the comment)	15. Recommendation (Provide detailed recommendation of the changes necessary to correct/resolve the comment)	16. Disposition (Provide justification if NOT accepted.)
		However, the date of September 30, 2012, is too far out for this milestone because that would stretch the design completion out and thus place in jeopardy all of the follow-on activities that must meet a critical path for completion of the remedial action.		revision to the M85-06-01 milestone change package. It is expected that follow-on discussions will address 221-U Facility remediation.

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5. Document Number(s)/Title(s) Remedial Design/Remedial Action Work Plan for the 221-U Facility (DOE/RL-2006-21, Draft A)		6. Program/Project/Building Number 221-U		7. Reviewer Rick Bond, Jennifer Ollero, Oliver Wang		8. Organization/Group Waste Management		9. Location/Phone	
17. Comment Submittal Approval:		10. Agreement with indicated comment disposition(s)		11. CLOSED					
Date 3/7/07	Organization Manager (Optional) Ron Skinnarland	Date	Reviewer/Point of Contact Jennifer Ollero		Date	Reviewer/Point of Contact			
		Author/Originator				Author/Originator			
Item	Location in Document	Comment				Hold Point	Disposition (Provide justification if NOT accepted.)		Status

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1.

General: Suggest re-formatting RD/RAWP for clarity and consistency with the 221-U Record of Decision, and the RD/RAWP for the 200 North Area Waste Sites (DOE/RL-2006-69, Draft B).

Justification: The current RD/RAWP as written is difficult to follow. The project phases are not well defined.

Modification Needed: Suggest re-formatting the sections as follows:

1.0 Introduction:

1.1 Purpose

1.2 Scope,

1.3 Description of ROD,

1.4 Updates to RD/RAWP

2.0 Basis for Remedial Action:

2.1 Record of Decision Summary and Decision Definition

2.2 RAO

2.3 RAG

2.4 Application of RAGs

2.5 ARARs

2.6 Remedy Description

3.0 Remedial Design Approach

4.0 Remedial Action Approach and Management

4.1 Project Team

4.2 Remedial Action Work Activities

4.3 Project Schedules and Cost Estimate

4.4 Change Management/Configuration Control

4.5 Remedial Action Planning Documentation

4.6 Attainment of RAOs

4.7 CERCLA Cleanup Documentation

5.0 Environmental Management and Controls

5.1 Waste Management

5.2 Standards Controlling Releases to the Environment

5.3 Reporting Requirements for Non-routine Releases

5.4 Release of Property (if Applicable)

5.5 Cultural and Ecological Resource Protection Standards

5.6 Radiation Controls and Protection

5.7 Quality Assurance

6.0 References

Accept. The 221-U RD/RAWP format will be modified to more closely match the suggested format.

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2.

General: This RD/RAWP needs to identify what is and is not addressed, but was identified as a requirement in the ROD. Specifically, there are certain actions that were identified in the ROD (e.g. detailed schedules, points of compliance) that are either not in the document or do not meet the intent of the requirement. If DOE plans to develop this RD/RAWP in phases, and revise as conditions change, then the introduction of this Plan needs to reflect how the Plan is being developed.

Modification Needed: Update the Introduction to include a discussion on how the RD/RAWP is being developed and implemented.

Accept; The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.

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3. Section 4.0

General: This document does not read as a Remedial Design/Remedial Action Work Plan. The Remedial Design Approach, per the TPA Action plan (Section 7.3.9) requires:

"A number of items will be completed during the RD phase, including, but not limited to the following:

- *Completion of design drawings*
- *Specification of materials of construction*
- *Specification of construction procedures*
- *Specification of all constraints and requirements (e.g. legal)*
- *Development of construction budget estimates*
- *Preparation of all necessary and supporting documentation"*

The RD section of this Plan does not adequately address these elements.

Modification Needed: Suggest that the RD section be revised to reflect elements of design that are being subcontracted out to meet the intent of the first 3 bullets. Suggest "beefing" up the RD section to include discussions of any constraints, requirements, etc. As currently written, the RD section does not have enough detail to qualify as "design".

Accept; The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development. The RD/RAWP contains only conceptual design information that is currently available, and detailed design will be provided in separate Remedial Design Report documentation.

However, it should be noted that early remedial activities associated with canyon reactivation do not necessarily involve engineering "design"; rather, these activities involve skill-of-the-craft level work, such as load testing and repairing the crane. Therefore, RL intends to apply a graded approach to design and document development for the various remedial activities.

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4.

General: An RD/RAWP implements the selected remedy of the ROD. This document is written as though selection of a remedy hasn't occurred. There appears to be a significant amount of "cut and paste" from the ROD, which is acceptable, but must still be updated to reflect the current phase of the project and should be expanded upon.

Modification Needed: Revise the document to implement the remedy. Specifically, page 2-4, Section 2.3.2 *Description of Construction Component of the Selected Remedy*, 1st bullet: "Residual materials that would have transuranic isotope concentrations greater than 100 nCi/g after stabilization (such as the contents of a tank in process cell 30) will be removed and dispositioned prior to stabilization in accordance with the approved RD/RAWP." **This is the same language that appears in the ROD on page 49. This RD/RAWP often reads as a pre-decisional documentation or the ROD. Consequently, this RD/RAWP is supposed to be the "approved RD/RAWP.**

Accept; However, the RD/RAWP is required to contain only conceptual design information, and Chapter 5 of the RD/RAWP does contain some discussions of the remedial action approach at a conceptual level. This chapter also refers the reader to additional, detailed studies that have been performed, or are in the process of development (e.g., Cell 30 Tank Disposition study). Additionally, newly prepared conceptual design information will be added to the revised RD/RAWP.

The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.

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5.

General: This RD/RAWP doesn't follow the ROD Requirements: page 49 of the ROD states that the RD/RAWP will "document the point of compliance for groundwater protection" however, this document doesn't mention the point of compliance. Please include with justification.

Modification Needed: Please include a discussion on how or when the point of compliance for groundwater protection will be addressed in the justification.

Accept; The point of compliance for groundwater protection will be established during a later phase of remedial design. This fact will be indicated in the revised RD/RAWP.

The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.

6.

General: The ROD requires that "The schedule and procedures that will be used to implement the multi-year work effort required by the ROD will be described and documented in the RDR/RA." However, this document does not provide enough detail to adequately address a "multi-year" work effort.

Modification Needed: Please include a discussion into the *Project Schedules and Cost Estimate* Section.

Accept; The RD/RAWP provides conceptual information regarding the undertaking of the remedial action. As noted in Section 3.2, the cost estimate will be revised as design progresses. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.

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7.		<p>General: This Plan doesn't identify how or when the document will be updated. Modification Needed: Please include a discussion on updates to the RD/RAWP. May want to include a provision to allow updates to the Work Plan via the Unit Manager Meetings and the frequency for updates.</p>		<p>Accept; The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Figure 3-1 will be revised to show the phased approach to design and document development. Additionally, text will be added to address future revisions to the work plan.</p>	
8.	<p>Page 1-1, Section 1.0, line 26, last sentence</p>	<p>Specific: Add the following sentence to the paragraph, "The U Plant is referred synonymously as the 221-U Facility Complex, or simply 221-U Facility in many Hanford documents."</p>		<p>Accept; The sentence will be added to the text as requested.</p>	
9.	<p>Page 1-6, last paragraph And Page 3- 2, Section 3.2</p>	<p>Specific: The ROD requires a detailed schedule. This RD/RAWP does not contain a detailed schedule or an explanation of a "phased" approach. Modification Needed: Revise/update the RD/RAWP to include a discussion detailing how schedules will be handled in this document. Justification: The RD/RAWP must address actions specified in the ROD, or outline an agreed to approach for how the requirement will be addressed.</p>		<p>Accept; The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.</p>	

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10. Page 2-1,
Section 2.2.1

Specific: The RAOs need more detail. This section is too light in the requirements and are not specific enough to meet the requirement of the ROD.
Modification Needed: Suggest revising to include a definition of what an RAO is (example: RAOs are site-specific goals that define the extent of cleanup necessary to achieve the specific level of remediation at the site.”
 Also suggest identifying the RAO and then describing how that RAO will be achieved. (see text in DOE/RL-2006-69, Draft B, page 2-1)

Accept; The remedial action objectives were discussed in detail in the Final Feasibility Study for the Canyon Disposition Initiative (DOE/RL-2001-11, Revision 1) and the Proposed Plan for Remediation of the 221-U Facility (Canyon Disposition Initiative), DOE/RL-2001-29, Revision 0). The level of detail for the RAOs was also finalized by the Tri-Party Agencies in the ROD. However, some additional explanatory text will be provided.

11. Page 2-3,
Section 2.2.2
and 2.2.3

Specific: The statement regarding PRGs (preliminary remediation goals) in Section 2.2.2 is misleading. Section 2.2.2 states that “Each of the remedial alternatives discussed in the final feasibility study was evaluated against the PRGs as a part of the CERCLA decision-making process.” In the same paragraph, it also states that “A list of PRGs was developed to define the specific cleanup goals that will result in achievement of the RAOs (remedial action objectives).” However, Section 2.2.3 states that “when a remedy is established that leaves contamination in place, the remedy is not based on cleaning up to RAGs, but rather on containing the contamination in such a fashion that it presents an acceptable level of risk to human health and the environment.” These conflicting statements need to be clarified.

Accept; The text will be clarified to revise the conflicting statements.

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12. Page 2-5, 3rd
bullet

Specific: Please define how surface contamination on the canyon walls, deck and ceiling will be addressed in more detail.

This section of the RD/RAWP provides a basic description of the selected remedy. Additional conceptual level information, including methods of addressing surface contamination, is provided in Chapter 5.0. (See Section 5.3.3.)

13. Page 2-5

Specific: Missing a discussion of the engineered barrier (from page 52 of the ROD).

A discussion of the engineered barrier is provided in the 5th bullet on Page 2-5, and is based on the discussion provided in the ROD.

14. Page 2-9,
Section 2.4

Specific: Two ARARs that were identified in the ROD have been omitted from the RD/RAWP. Specifically, WAC 173-340 and 173-201A. Please provide justification for removal.

Accept. RL believes the WAC 173-340 and 173-201A ARARs were included in the ROD in error and that these are not ARARs to the selected remedy. These ARARs were identified as being relevant and appropriate to developing cleanup standards. However, the selected remedy (a containment remedy) will sever potential pathways of exposure while leaving contamination in place, and no cleanup standards exist for the selected remedy. Therefore, these ARARs were excluded from the RD/RAWP ARAR table. Clarifying text will be added to the document.

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15. Section 3.0

Specific: The organization of this section is confusing. Suggest reorganizing (see Comment 1) for clarity and consistency with other RD/RAWPs.

Accept; The document will be re-formatted to more closely reflect the format of the 200 North Area Waste Sites RD/RAWP (DOE/RL-2006-69, Draft B) and the Remedial Design Report/Remedial Action Work Plan for the 100 Area (DOE/RL-96-17, Revision 5).

16. Page 3-2
(Figure 3-1)
and Page 3-3
(Table 3-1)

Specific: Figure 3-1 (Page 3-2) and Table 3-1 (Page 3-3) describes the 10-year project schedule and associated cost estimates of \$125,900,000 with assigned narrow range of accuracy. Not enough information is provided to explain these important data and analyses. A couple of pages description including estimate methodology and contingencies would help Ecology understand the project schedule/cost processes.

A detailed cost estimate was provided in Appendix K of the Final Feasibility for the Canyon Disposition Initiative (DOE/RL-2001-11, Revision 1). The information contained in the RD/RAWP is reflective of design information that was available at the time the RD/RAWP was prepared. This information will be refined as the design matures.

17. Page 3-6
Section 3.3.4

Specific: No discussion of a Mitigation Action Plan.
Modification Needed: Please revise for inclusion of a Mitigation Action Plan.

Accept; text will be added to the RD/RAWP to address the Mitigation Action Plan.

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18.	Page 3-20, Section 3.3.12	<p>Specific: This section does not contain enough detail on attainment of the RAOs.</p> <p>Modification Needed: Suggest revising section to include more detail on how the RAOs will be attained through the selected remedy.</p>		<p>Accept; Additional detail regarding the attainment of RAOs was provided in the Final Feasibility for the Canyon Disposition Initiative (DOE/RL-2001-11, Revision 1), Chapter 3.0. RL feels that the level of detail provided in the RD/RAWP is sufficient. However, some clarifying language will be added to this section.</p>	
19.	Page 4-2, Line 21	<p>Specific: "A graded approach will be implemented as part of the design process . . ." What is a "graded approach" for design?</p>		<p>Accept. A "graded approach" for design refers to the fact that the early remedial activities (e.g., railroad tunnel reactivation) do not involve true engineering design elements. For such activities, development of formal design will not occur (although additional information beyond what is in the RD/RAWP will be provided in RDR format). However, later remedial actions (e.g., construction of the barrier) will require development of true engineering design. Clarification will be provided.</p>	

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20. Page 4-2,
Section 4.3.1

Specific: What will be included in the first design package? What is required for design?

Accept. The first "design package" (RDR) will contain information regarding canyon system reactivation (e.g., reactivation of the railroad tunnel). However, as stated in the responses to comments #3 and #19, canyon reactivation generally will not require true engineering design; rather, it will involve skill-of-the-craft level work. Therefore, a graded approach to development of design and RDR documentation must be applied.

21. Page 5-1,
Section 5.0

Specific: Under what section of the "Remedial Action Approach" is a discussion on the removal of asbestos and PCB contaminated equipment prior to demolition?

Accept. Removal of asbestos and PCB contaminated equipment is not specifically discussed. The ROD includes ARARs addressing these contaminants, and a risk-based disposal determination was made by EPA (as documented in the ROD) for PCB contaminated equipment left within the canyon. However, other drivers (such as safety regulations) may drive removal of such contaminants from outbuildings; discussion will be added to sections addressing demolition of outbuildings.

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5. Document Number(s)/Title(s):

DOE/RL-2006-21, Remedial Design/Remedial Action Work Plan for the 221-U Facility

6. Program/Project/Building Number

221-U Canyon

7. Reviewer

C. E. Cameron

8. Organization/Group

U.S. EPA/Hanford Project Office

9. Location/Phone

309 Bradley Blvd., Suite 115/376-8665

17. Comment Submittal Approval:

Organization Manager (Optional)

10. Agreement with indicated comment disposition(s)

Reviewer/Point of Contract

Date

Author/Originator

11. CLOSED

Reviewer/Point of Contract

Date

Author/Originator

12. Item	13. Page/Line	14. Comment(s)/Discrepancy(s) (Provide technical justification for the comment)	15. Recommendation (Provide detailed recommendation of the changes necessary to correct/resolve the comment)	16. Disposition (Provide justification if NOT accepted.)
1	General	The document provides a description of the major tasks that need to be performed, but there are some tasks where a decision should have been made on the approach even though many of the details need to be developed during the design phase. It would have been better if the U.S. Department of Energy (DOE) had made a decision on how to deal with these challenges and included this definitively in the work plan. Specificity and decisiveness do not need to be abandoned because the work plan can be revised if conditions warrant updates or changes.		Accept; In accordance with the TPA Action Plan, the RD/RAWP will focus on provision of conceptual design information. The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, the graphic in Figure 3-1 will be revised to show the phased approach, including submittal of RD/RAWP revisions and design information as appropriate.
2	Specific	One particularly noteworthy example of missing an opportunity to refine the plan for the remedial action is the disposition of low-risk rubble. There should be no ambiguity about the use of this rubble as fill, for the 271-U basement excavation, or any other portions of the site under the barrier. This rubble can be used to offset resource use at borrow areas. Screening levels for radionuclides associated with the rubble should be defined to bound what is meant by "low-risk". Methods of using field instruments to screen rubble based on radionuclide levels and procedures for determining if dangerous waste constituents are present need to be described so that the rubble can be sorted properly. The		Accept; There is conceptual level discussion regarding use of rubble as fill in multiple locations in the RD/RAWP. Information will be included regarding the disposal pathway for rubble that is determined not to be "low-risk." Additional details regarding the use of low-risk rubble as fill will be developed in a later phase of design. Figure 3-1 will be revised to depict a phased approach

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		disposal pathway for rubble that fails to meet the low-risk criteria should also be defined in this document.		for design and document development.
3	General	Other examples of indecision include the "disposition" of the wing wall of the railroad tunnel and a lack of rules to direct revegetation of disturbed areas (when to revegetate considering the industrial land use). These planning decisions need to be made and then proposed in the draft document. The rules and criteria used to guide and control activities have to be present for the work plan to be used effectively.		Accept; Details regarding the disposition of the wing wall and revegetation of the barrier will be developed in a later phase of design. Figure 3-1 will be revised to depict a phased approach for design and document development.
4	Specific	Another reason this document is deficient is its lack of performance standards developed to benchmark the performance of the remedy. Section 11.6 of the Tri-Party Agreement Action Plan contains requirements for work plans such as RD/RA work plans. This section includes the following statement, "At the time work plans are submitted for approval they shall describe in detail the work to be done and include the performance standards to be met." The only performance standard presented in the work plan submitted by DOE for review is for barrier performance (meeting an infiltration rate of 3.2 mm/yr long-term average). This performance standard was actually specified in the ROD to shore up monitoring requirements for the non-traditional barrier design (evapotranspiration barrier) and because the remedy will not have a traditional liner-leachate collection system.		Accept; The RD/RAWP will focus on provision of conceptual design information. The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, the graphic in Figure 3-1 will be revised to show the phased approach for design and document development.
5	General	Unfortunately, the document is also lacking the description of the types of performance monitoring that will need to be conducted to demonstrate that the performance standard is being met.		Accept; Conceptual information pertaining to performance monitoring will be added to the text. More detailed information will regarding performance monitoring will not be available until a later phase of design. Figure 3-1 will be revised to depict a phased approach for design and document development.
6	Specific	One thing that should have a standard is the performance of grout in supporting the structure or immobilizing waste. Modeling of contaminant transport within the monolith of the constructed remedy should have been utilized to develop		Accept; RL will incorporate performance standards as appropriate to activities at the conceptual stage of design.

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		specific criteria to use for grout formulation.		
7	General	Other performance standards might include measures of the effectiveness of institutional controls, and bounding accumulation levels in high-volume air samplers. The maximum amount of radionuclides on air sampler media should be specified since the monitoring locations have already been identified and potential-to-emit calculations have been performed for the main phases of the remedial action. These examples are by no means exhaustive.		Accept; RL will incorporate performance standards as appropriate to activities at the conceptual stage of design. However, RL believes that use of high-volume air samplers and establishment of maximum allowable radionuclides on air sampler media is inappropriate for the 221-U remedial action.
8	General	The document is not much more than a compilation of information from the feasibility study and ROD. In fact, the feasibility study appendices have much more detail and seem to indicate that more thought was put into these early planning efforts than those used to develop this document.		Accept. Available conceptual design information will be provided in the revised RD/RAWP, and as the design matures, the RD/RAWP will be revised again as appropriate to incorporate new conceptual design information as it is developed. It should be noted that the final feasibility study appendices were developed to support estimates of cost for the purposes of remedial alternative evaluation. Details provided in the appendices do not necessary reflect the actual design of the remedial action.
9	General	Studies which are being used to support the remedial design need to be described in more than a cursory fashion, especially since they may provide much needed detail. According to EPA guidance (EPA 540-G-90-001), a work plan for remedial design must include design criteria and assumptions. The document contains few examples of design criteria and the majority of those examples are qualitative.		Accept. Available conceptual design information will be provided in the revised RD/RAWP, and as the design matures, the RD/RAWP will be revised again as appropriate to incorporate new conceptual design information as it is developed.
10	General	One of the prime issues that has affected the review cycles of work plans and other plans has been the pulling back of detail		Accept. The Introduction and portions of the RD/RAWP addressing

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		that is necessary to describe activities. This document is like many submitted in recent years that have a paucity of details describing important functions or tasks. There either needs to be enough detail provided in the work plan to understand what is being done in the field or laboratory, or the specifics need to be in a regulatory citation or referenced (named or numbered) procedure that is available to DOE and the regulatory agencies.		remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, the graphic in Figure 3-1 will be revised to show the phased approach for design and document development.
11	General	The scope and complexity of the remedial design and remedial action for the 221-U Facility are more like those of the K-Basins project than they are like the dig-and-haul actions in the river corridor. Considering this, the K-Basins work plan (DOE/RL-99-89, Revision 1) draws a much better connection between the ARARs and the activities and procedures that will be used to fulfill them. DOE needs to provide a similar link between the ARARs and the planned work for the 221-U Facility.		The cited document is an RDR/RAWP containing more advanced design and compliance information than appropriate for the 221-U Facility RD/RAWP. The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach for design and document development. The requested information will be provided in future Remedial Design Report submittals.
12	Specific	The document does not fulfill the requirement in the ROD to include a more detailed map showing the site and land use control boundaries. EPA appreciates the map showing the entire U Plant area (including 200-UW-1 waste sites and ancillary facilities) and the one showing placement of support areas during the construction of the remedy. However, there is no map in the document with comparable or greater detail than Figure 7 from the ROD. That figure illustrates the pre- and post-remediation land use control boundaries.		Accept; The RD/RAWP will be revised to include a figure delineating site and land use control boundaries during initial remedial activities. These boundaries will change during remedy implementation, and the figure will be revised to reflect the changes as the remedy progresses.
13	Specific	The document should be revised to require that a new Sampling and Analysis Plan be developed to cover post-ROD sampling activities focused on waste designation and management.		Accept. The following text is found in Section 3.6.2: "Although the majority of the sampling activities have been completed, the field analytical team will continue to perform any additional sampling and analysis in

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				compliance with this SAP, or a new SAP will be prepared as needed.” A clause will be added to the end of this sentence, as follows: “...a new SAP will be prepared as needed (e.g., to support waste designation and management).
14	Specific	The waste management section needs to indicate that it is the waste management plan.		Accept; The text in Section 3.3.5 will be revised as requested.
15	Specific	Also, the schedule should call out when the Remedial Design Report (including a 90% design) will be submitted to the regulatory agencies per Section 7.3.9 of the Tri-Party Agreement Action Plan. The Operations and Maintenance Plan submittal also should be included in the schedule.		Accept; Information pertaining to future submittals of 90% design information and the Operations and Maintenance Plan will be included in Figure 3-1.
16	Specific	The role of the regulatory agencies needs to be correctly portrayed in the document. The project managers for all three parties should be identified as decision makers in Section 3.1. The document should also be modified to indicate that the regulatory agencies can take an extension in the review of design packages without needing permission from DOE, which is consistent with the Tri-Party Agreement.		Accept; The text will be revised as requested. The text will also include a discussion stating that, consistent with the TPA Action Plan, the 90% design RDR is a primary document.
17	Specific	The last sentence of Section 3.2.1 needs to be replaced with the sentence that is in DOE/RL-99-89 (Revision 1) and accurately reflects EPA's role. That sentence should read, "The EPA will make a determination of the significance of the change and appropriate documentation will follow based on the type of change." However, there is some question about the utility of describing in the RD/RA work plan the process by which a decision document is modified. The RD/RA work plan should focus more on how changes are made to the plan itself.		Accept; The text in Section 3.2.1 will be revised to focus on how changes will be made to the RD/RAWP.
18	Specific	The closeout guidance contained in Appendix A is not consistent with EPA guidance from the Superfund Program Implementation Manual. A final closeout report is restricted to closing an entire NPL site, not a portion of one. EPA believes that a construction completion report would be more appropriate for the intended purpose. Also, eventually the information needs to be rolled up in a Remedial Action Report.		Accept. However, Appendix A was determined to be unnecessary at this phase of the remedial action; therefore, it will be deleted from the revised RD/RAWP.

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		There may be several ways that this can be accomplished including the possibility of combining information from more than one canyon or remedial action. EPA is willing to meet with DOE and the Washington Department of Ecology (Ecology) to discuss closeout of remedial actions. There are pertinent sections of the Tri-Party Agreement Action Plan (e.g., Section 7.3.10) and guidance such as that contained in EPA 540-R-98-016 that we should discuss. Whatever the report ends up being called, it needs to be added to the administrative record file.		
19	Specific	EPA does not understand why there is an appendix discussing the baseline risk assessment (Appendix B). If there is a good reason for inclusion, please explain. Also, if the appendix material is retained, it should describe the approach used to estimate ecological risk as this is an important part of the baseline risk assessment. Text in the feasibility study and ROD should help in writing this part.		Accept; This appendix will be deleted from the revised document.
20	Specific	The text of Appendix C should indicate that the public involvement plan is consistent with the public involvement plan for the Hanford Site. Also, DOE should make sure they plan to do all of the things in this specific plan.		Accept; The text will be revised to indicate that the public involvement plan is consistent with the Hanford Site public involvement plan.
21	General	To conclude, the design and remediation process for this project will require a multi-year, multi-phase effort. The document has a commitment to revise the work plan when the design of the barrier has progressed. It must contain a commitment to provide updates at logical points in the remedial design and remedial action planning process and those points need to be identified to the extent possible at this time.		Accept. The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.
22	General	There are a few additional, minor comments that EPA would be like to provide at the project level. EPA requests a meeting to pass along these additional comments and to provide an opportunity to clarify comments contained in this letter.		Accept; RL received an additional set of comments in letters dated March 20, 2007 and April 23, 2007. As requested, meetings were held to discuss the comments.
23	2-3	Section 2.2.3. The author is confusing the concept of a containment remedy with the use of RAGs or cleanup levels. The statement in the last sentence is applied too broadly and is in conflict with the fact that one is allowed to leave behind		Accept; the suggested revisions will be made.

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		contamination as long as it meets the RAGs and that such a situation does not constitute a containment remedy. Please revise to accurately characterize how RAGs are applied in concept and then explain that the remedy for 221-U is a containment remedy that does not rely on meeting cleanup levels, but rather on limiting or preventing exposure.		
24		EPA received an advance copy of the comments from Ecology and believes that they are good comments. They had an especially good catch on the fact that a groundwater point of compliance was not spelled out in the work plan. It is not acceptable to put off the details of the groundwater monitoring until the other U Plant area decisions are made. This is basically a CERCLA disposal unit (similar to ERDF) and it must meet the substantive requirements of the landfill regulations that are ARARs. This leaves little room for debate about where the point of compliance must be located (i.e., the edge of the landfill structure or just off of the cap toe). The facility has a large cross-sectional area with respect to the groundwater flow direction and EPA believes that if hydrologic conditions warrant more than 1-up-3-down, then this should be accounted for in the design. At a minimum there needs to be a 1-up-3-down monitoring network and this needs to be covered in the work plan. However, considering that integration is important and the other U Plant area decisions will be made before the remedy for 221-U is constructed, changes can be made in future revisions of this work plan (and the O & M plan) to maximize the use of an area-based monitoring scheme as long as it isn't too much of a stretch from the standard landfill approach and the point of compliance does not change.		<p>Accept; The point of compliance for groundwater protection will be established during a later phase of remedial design. This fact will be indicated in the revised RD/RAWP.</p> <p>The Introduction and portions of the RD/RAWP addressing remedial design will be revised to include a discussion of a phased approach to completion of design. Additionally, Figure 3-1 will be revised to show the phased approach to design and document development.</p> <p>RL would also like to point out to EPA that although the substantive requirements of the landfill regulations are listed as ARARs in the ROD, RL's position is that the remedial action for the 221-U Facility will not constitute a "CERCLA landfill" as stated in the comment.</p>
25		As indicated in the EPA comment letter from March 7, the coverage of ICs in the work plan is not much more than a cut-and-paste of what is in the ROD. The sitewide IC plan provides for the use of the RD/RA work plan and the O & M plan to provide the detailed processes or procedures for implementing the ICs. It was EPA's expectation that more detailed implementing procedures would be provided in the RD/RA work plan. These details need to be added to the		<p>Accept; The discussion of ICs will be revised to reflect specific actions that will be undertaken to implement ICs during initial remedial activities. This information will be modified as the remedial action progresses. The O&M Plan will address post-remedial action</p>

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revised work plan. Similarly, the O & M plan will need to have the implementing details for the post-construction/monitoring phase.

ICs.

26

5-14/Line
1

Section 5.5.2. It should be "selected remedy" instead of "preferred remedy."

Accept; The text will be revised accordingly.

ENCLOSURE 2

Draft Tri-Party Agreement Agreement-In-Principle (AIP)
for Central Plateau Facility Disposition

Consisting of 3 pages, including cover page



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Tri-Party Agreement

NEGOTIATION OF HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER REVISIONS FOR CENTRAL PLATEAU FACILITY DISPOSITION ACTIVITIES

The Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) addresses the disposition of key Hanford Site facilities in Section 8.0 of the Action Plan, Facility Decommissioning Process. The disposition path, as well as the roles of the U.S. Department of Energy (DOE) and the lead regulatory agencies, the U.S. Environmental Protection Agency (EPA) and the State of Washington Department of Ecology (Ecology), are broadly defined for facilities designated by the Tri-Party Agreement agencies as "key facilities" in Section 8.0. However, disposition path details for specific facilities (whether or not the facility is a "key facility") is not defined and has typically been determined on a case-by-case basis as the need arises. The Parties have entered into this Agreement in Principle to define the Parties' intent in negotiation and to establish the scope and schedule of the negotiations.

In light of the preceding, DOE, EPA, and Ecology agree to the following:

- A. To enter into negotiations by [date TBD] to identify revisions to the Tri-Party Agreement to reflect the essential elements from CERCLA Section 120, 40 CFR 300.5, Executive Order 12580, the May 22, 1995 DOE/EPA letter (Policy on Decommissioning Department of Energy Facilities Under CERCLA), and recent Central Plateau facility binning technical discussions. These elements are limited to:
 - 1.) Lead agency and lead regulatory agency responsibilities and interactions for disposition of specific structures;
 - 2.) Graded approach to lead regulatory agency involvement (e.g., degree of lead regulatory agency involvement increases with the level of hazard);
 - 3.) Disposition decision and implementation document approval requirements;
- B. To use the changes to the Tri-Party Agreement to replace all or part of the Long-Term Facility Decommissioning Plan (DOE/RL-96-0046).
- C. That the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) will be baseline regulation for the disposition of Central Plateau structures. Resource Conservation and Recovery Act (RCRA) requirements for closure of Treatment, Storage and Disposal (TSD) units will be integrated where possible with CERCLA response action activities.
- D. To include in the negotiations, discussions on specific milestones for the following:
 - 1.) Implementation of the Record of Decision, 221-U Facility (Canyon Disposition Initiative), Hanford Site, Washington;
 - 2.) Disposition of Tri-Party Agreement "key facilities" for which milestones have not already been established;
 - 3.) Disposition of Central Plateau TSD structures;



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Tri-Party Agreement

- E. To revise the relevant sections of the Tri-Party Agreement Action Plan to reflect the path forward as negotiated.
- F. That EPA and Ecology will serve in their capacities as lead regulatory agencies for facility disposition negotiations.
- G. To cooperate to provide briefings as determined to be appropriate to the State of Oregon, affected Indian Nations, the Hanford Advisory Board, and other stakeholders pursuant to the Community Relations Plan.
- H. To ensure that respective Headquarters' staff are kept up-to-date on negotiation progress and issues, and to inform each other in a timely manner of any specific concerns that may impact negotiations.
- I. To conclude negotiations no later than [date TBD.] Any of the Parties may terminate negotiations by written notice to the other Parties.
- J. Conduct the negotiations consistent with any agreements of the larger Tri-Party Agreement discussions currently in progress.

The Parties sign this agreement in recognition of their pledge of mutual best efforts to achieve, through cooperation and negotiation in good faith, the understanding as set forth this _____ day of _____ 2007.

Jay Manning, Director
State of Washington
Department of Ecology

Michael J. Weis, Acting Manager
U.S. Department of Energy
Richland Operations

Elin Miller, Administrator
U. S. Environmental Protection Agency
Region 10